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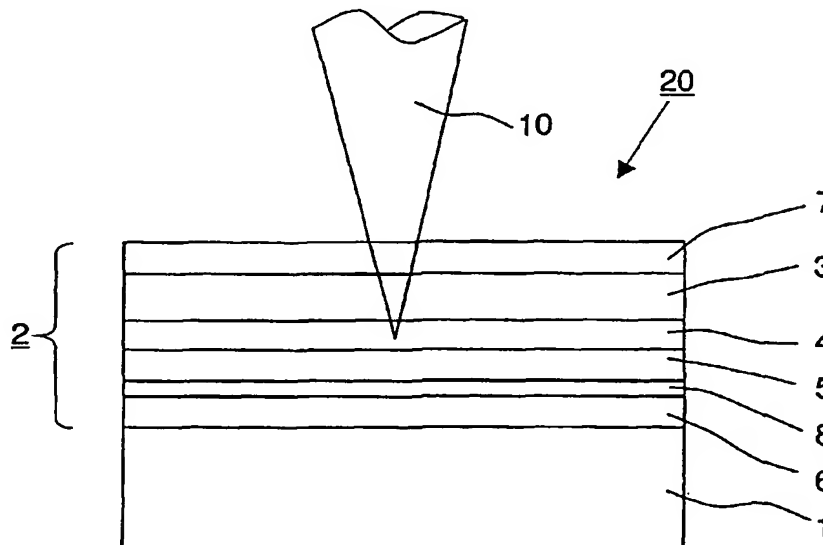
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(54) Title: **REWRITABLE OPTICAL DATA STORAGE MEDIUM AND USE OF SUCH A MEDIUM**



(57) **Abstract:** A rewritable optical data storage medium (20) for high-speed recording by means of a focused radiation beam (10) is described. The medium (20) comprises a substrate (1) carrying a stack (2) of layers. The stack (2) comprises a first dielectric layer (3), a second dielectric layer (5), and a recording layer (4) of a phase-change material of an alloy comprising Sb and Te. The recording layer (4) is interposed between the first dielectric layer (3) and the second dielectric layer (5). The alloy additionally contains 2 - 10 at.% of Ga, by which a significant improvement of the maximum data rate during direct overwrite is achieved. By furthermore adding 0.5 - 4.0 % of Ge to the alloy the archival life stability is enhanced.

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